

SPECIFICATIONS:

STEEL TUBE WALL REINFORCING @ 36" O.C. MAY BE USED FOR 8", 10", OR 12" BLOCK WALLS. REINFORCING SPACING CAN BE THE AVERAGE OF TWO ADJACENT SPACES WITH A MAXIMUM SPACING OF 50".

FOR EXAMPLE $(5'-0" + 3'-0")/2 = 4'-0"$ AVERAGE SPACING

STEEL TUBE WALL REINFORCING @ 50" O.C. MAY BE USED FOR 10", OR 12" BLOCK WALLS.

STEEL TUBE MUST HAVE MINIMUM 46KSI YIELD STRENGTH.

STEEL PLATE MUST HAVE 36KSI MINIMUM YIELD STRENGTH.

WELDING TO BE PER ASTM STANDARDS.

PRESTRESSING TUBES IS NOT ALLOWED WITHOUT PROPERLY ENGINEERED GUIDELINES.

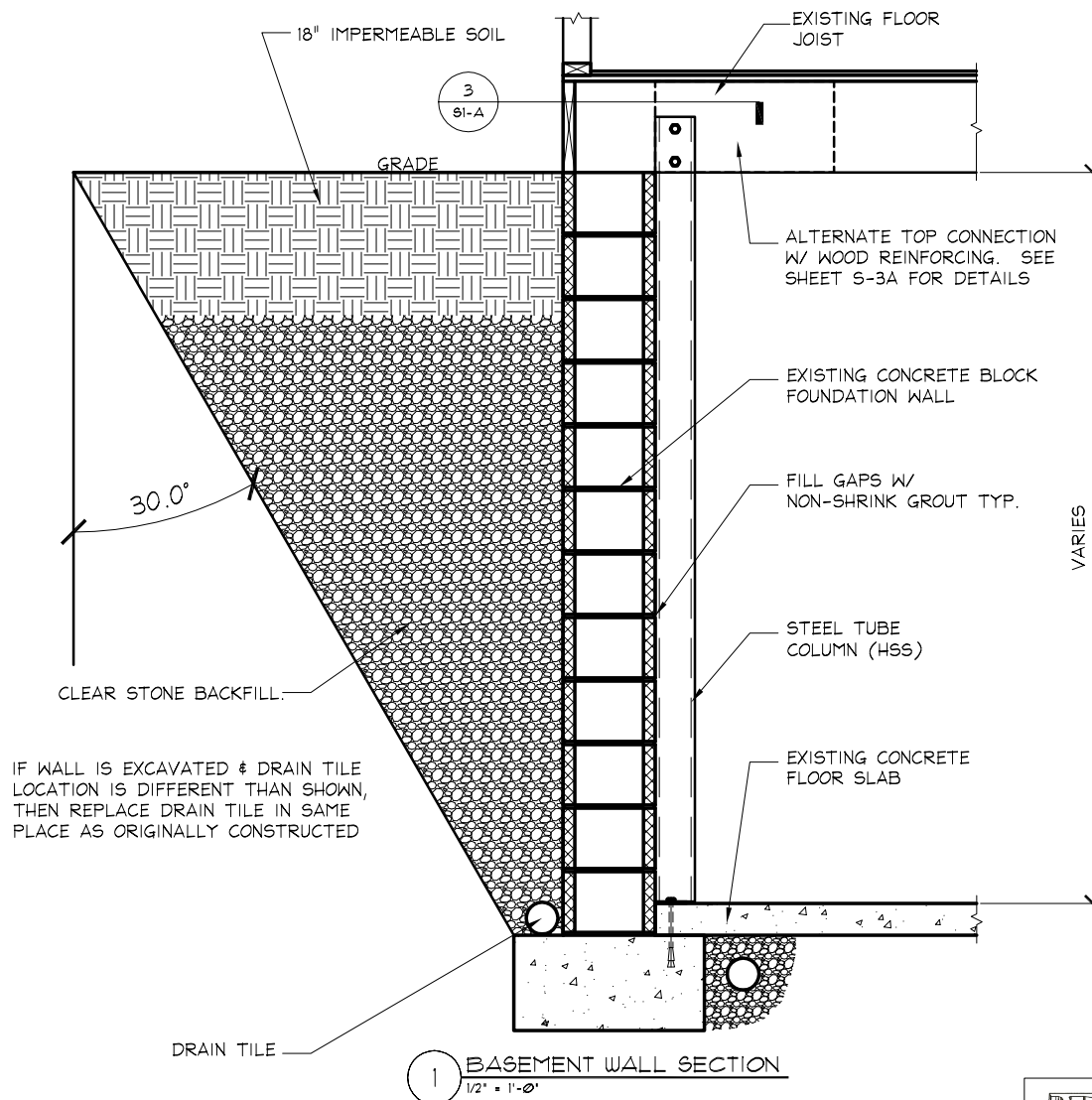
REINFORCING GUIDELINES ALSO APPLY TO POURED CONCRETE WALLS OF EQUIVALENT HEIGHT AND THICKNESS.

BOLTS TO BE ZINC PLATED CARBON STEEL OR BETTER.

NEW WOOD BLOCKING TO BE DOUG FIR NO.2 OR BETTER.

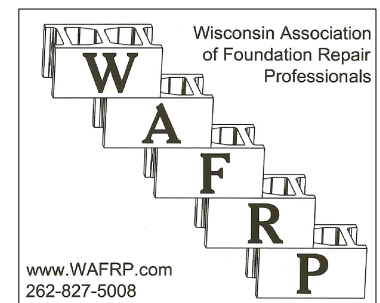
SCREW TYPE ANCHORS CAN BE USED IN LIEU OF EXPANSION BOLTS IN ALL CASES.

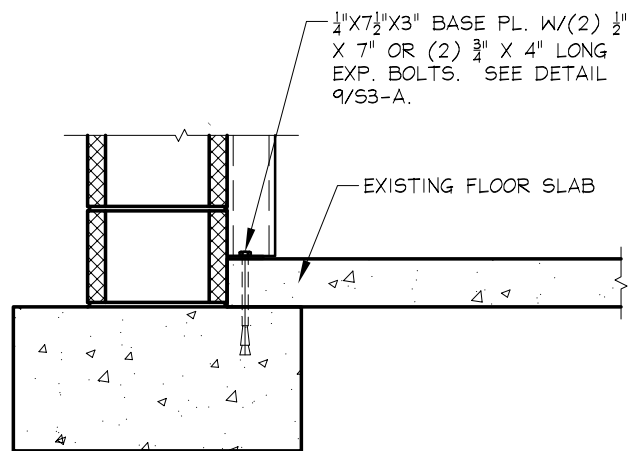
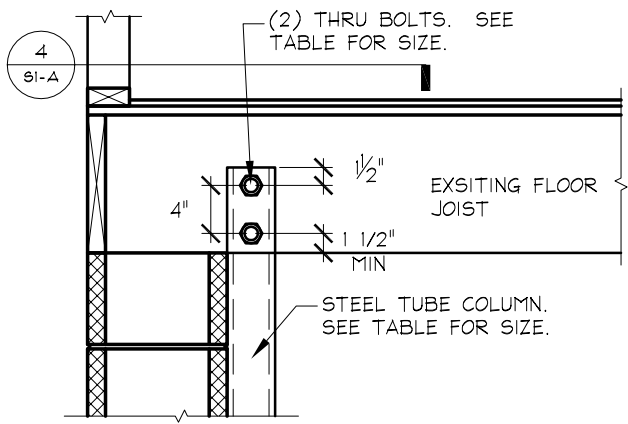
ALL STRUCTURAL CALCULATIONS FOR WOOD MEMBERS PER 2001 NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION (NDS).



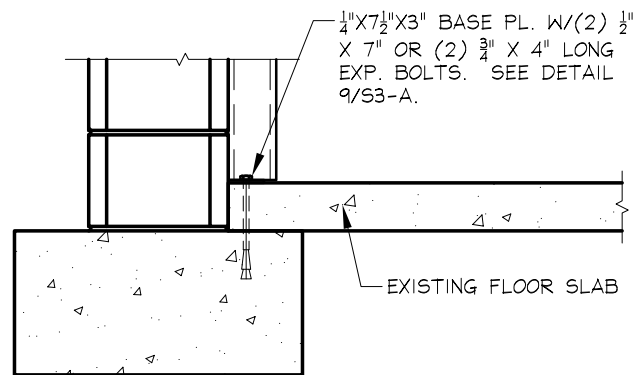
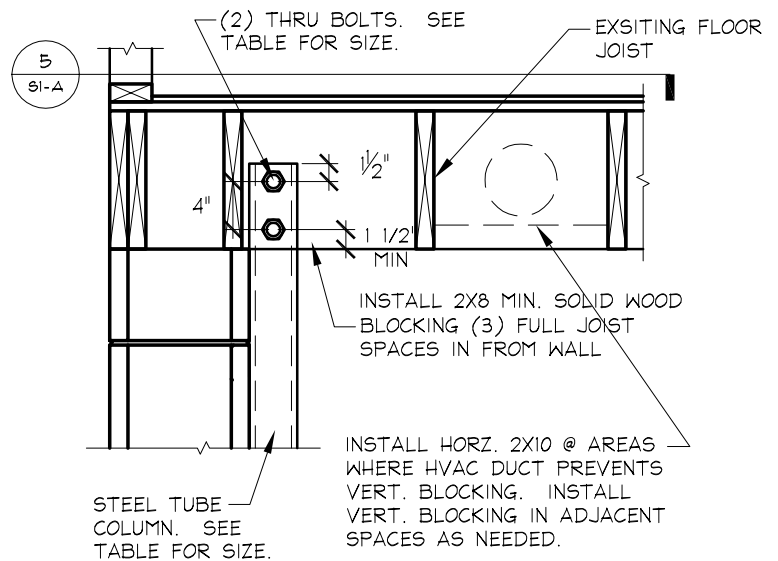
TITLE: 2 Bolt Basement Wall Reinforcing Details	
SHEET: S1-A, Appendix A	DRAWN: Jim Jendusa
DATE: 3/26/03	REVISION: 6/20/07

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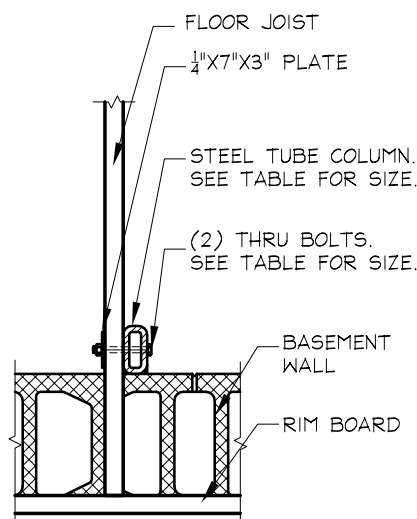




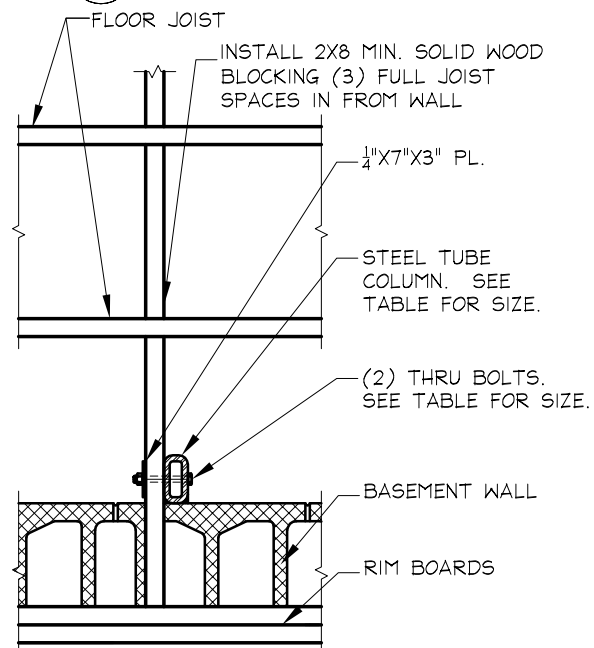
2 CONNECTION DETAIL SIDE VIEW
3/4" = 1'-0"



3 CONNECTION DETAIL SIDE VIEW
3/4" = 1'-0"



4 TOP CONNECTION DETAIL
3/4" = 1'-0"



5 TOP CONNECTION DETAIL
3/4" = 1'-0"

TITLE: 2 Bolt Top & Bottom Connection Details

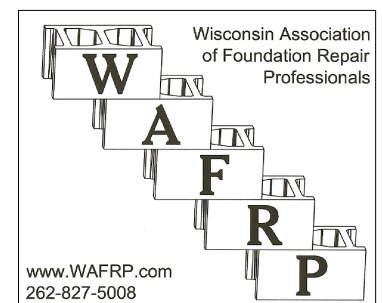
SHEET: S2-A, Appendix A

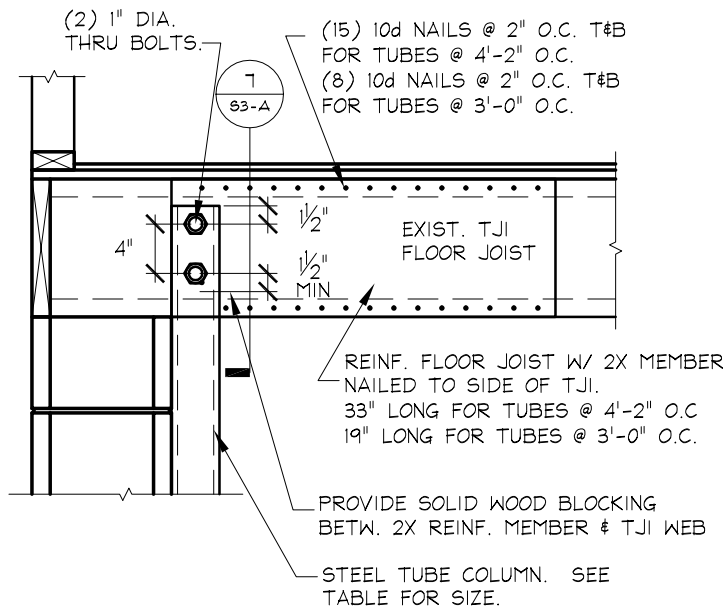
DRAWN: Jim Jendusa

DATE: 3/26/03

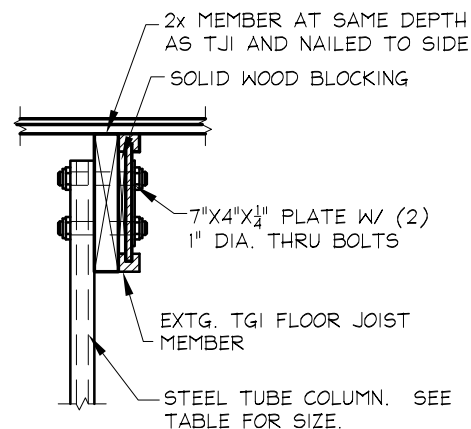
REVISION: 6/20/07

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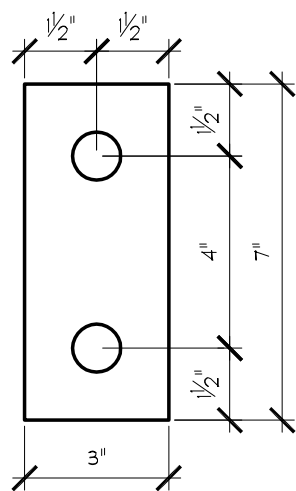




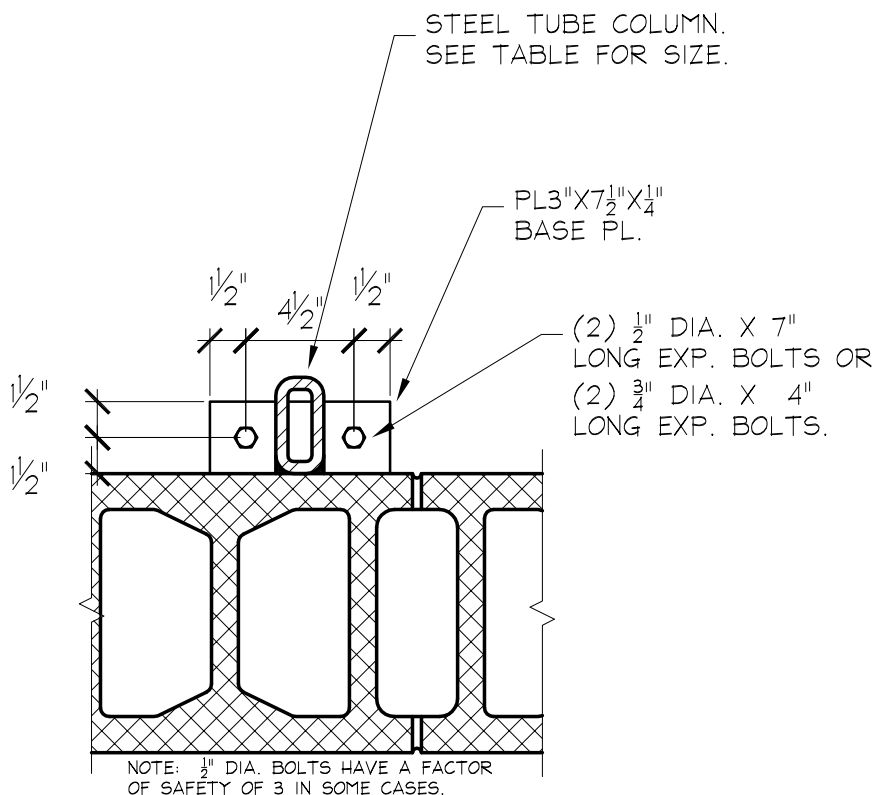
6 TJI CONNECTION DETAIL SIDE VIEW
3/4" = 1'-0"



7 TJI CONNECTION DETAIL SECTION
3/4" = 1'-0"



8 TOP PLATE DETAIL
3" = 1'-0"



9 BOTTOM CONN. DETAIL
1 1/2" = 1'-0"

TITLE: 2 Bolt Alt. Top Connection W/ Double Floor Joist

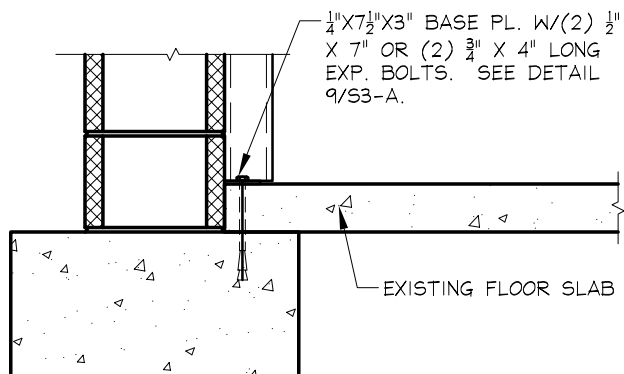
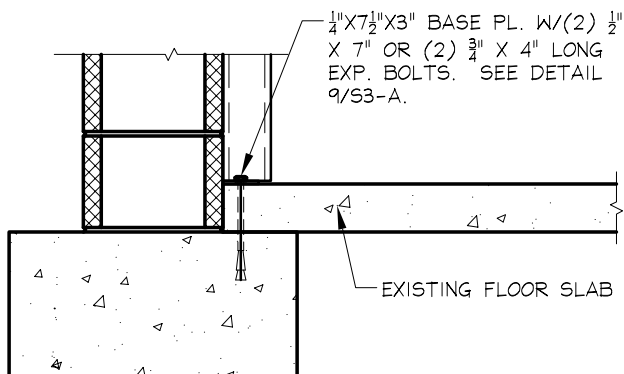
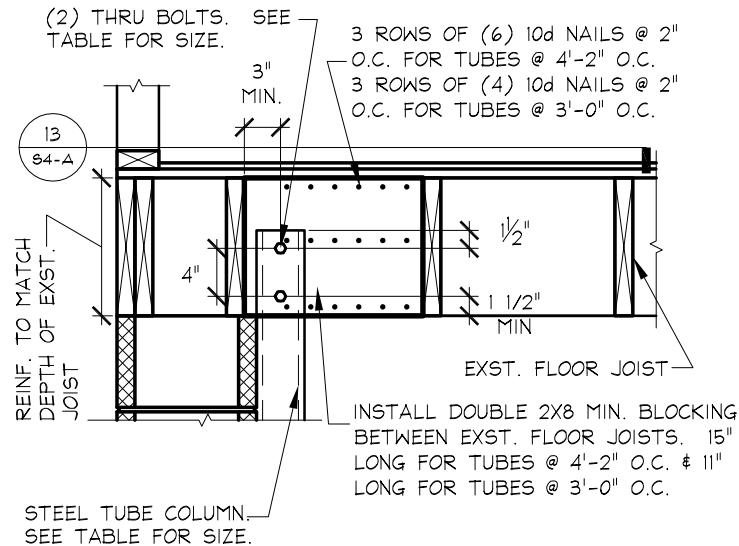
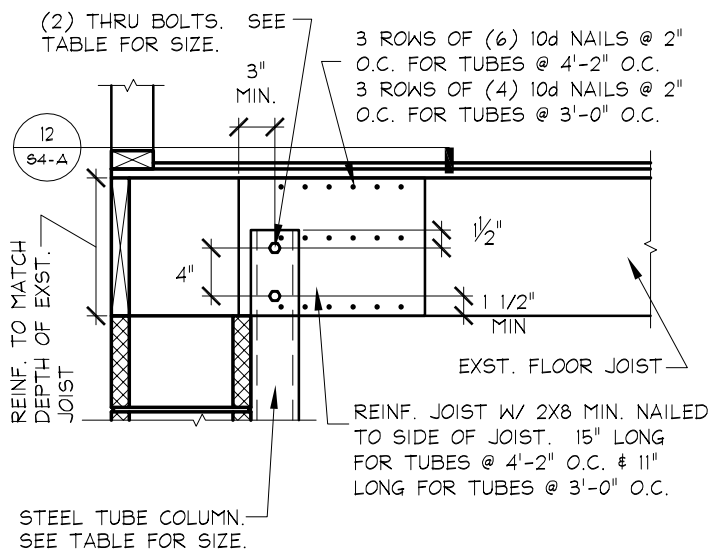
SHEET: S3-A, Appendix A

DRAWN: Jim Jendusa

DATE: 3/26/03

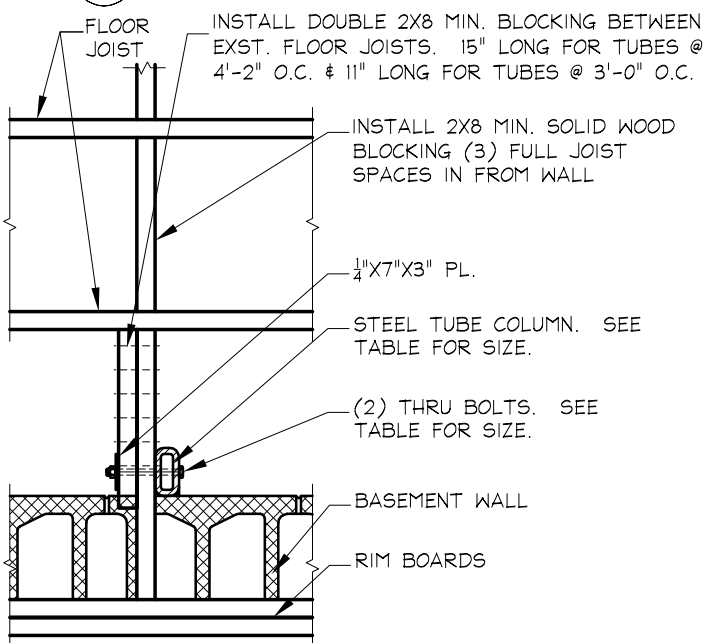
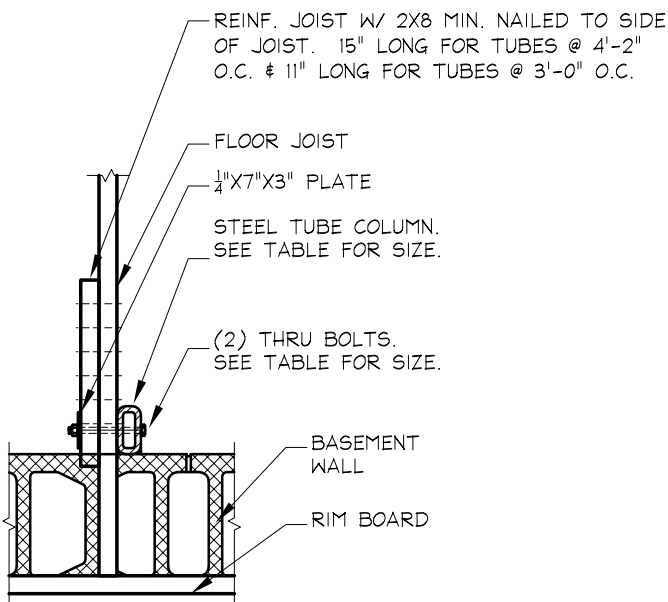
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10 CONNECTION DETAIL SIDE VIEW
3/4" = 1'-0"

11 CONNECTION DETAIL SIDE VIEW
3/4" = 1'-0"



12 TOP CONNECTION DETAIL
3/4" = 1'-0"

13 TOP CONNECTION DETAIL
3/4" = 1'-0"

TITLE: 2 Bolt Alt. Top Connection W/ Double Floor Joist	
SHEET: S4-A, Appendix A	DRAWN: Jim Jendusa
DATE: 3/26/03	REVISION: 6/20/07

SPECIFICATIONS:

STEEL TUBE WALL REINFORCING @ 36" O.C. MAY BE USED FOR 8", 10", OR 12" BLOCK WALLS. REINFORCING SPACING CAN BE THE AVERAGE OF TWO ADJACENT SPACES WITH A MAXIMUM SPACING OF 50".

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WELDING TO BE PER ASTM STANDARDS.

PRESTRESSING TUBES IS NOT ALLOWED WITHOUT PROPERLY ENGINEERED GUIDELINES.

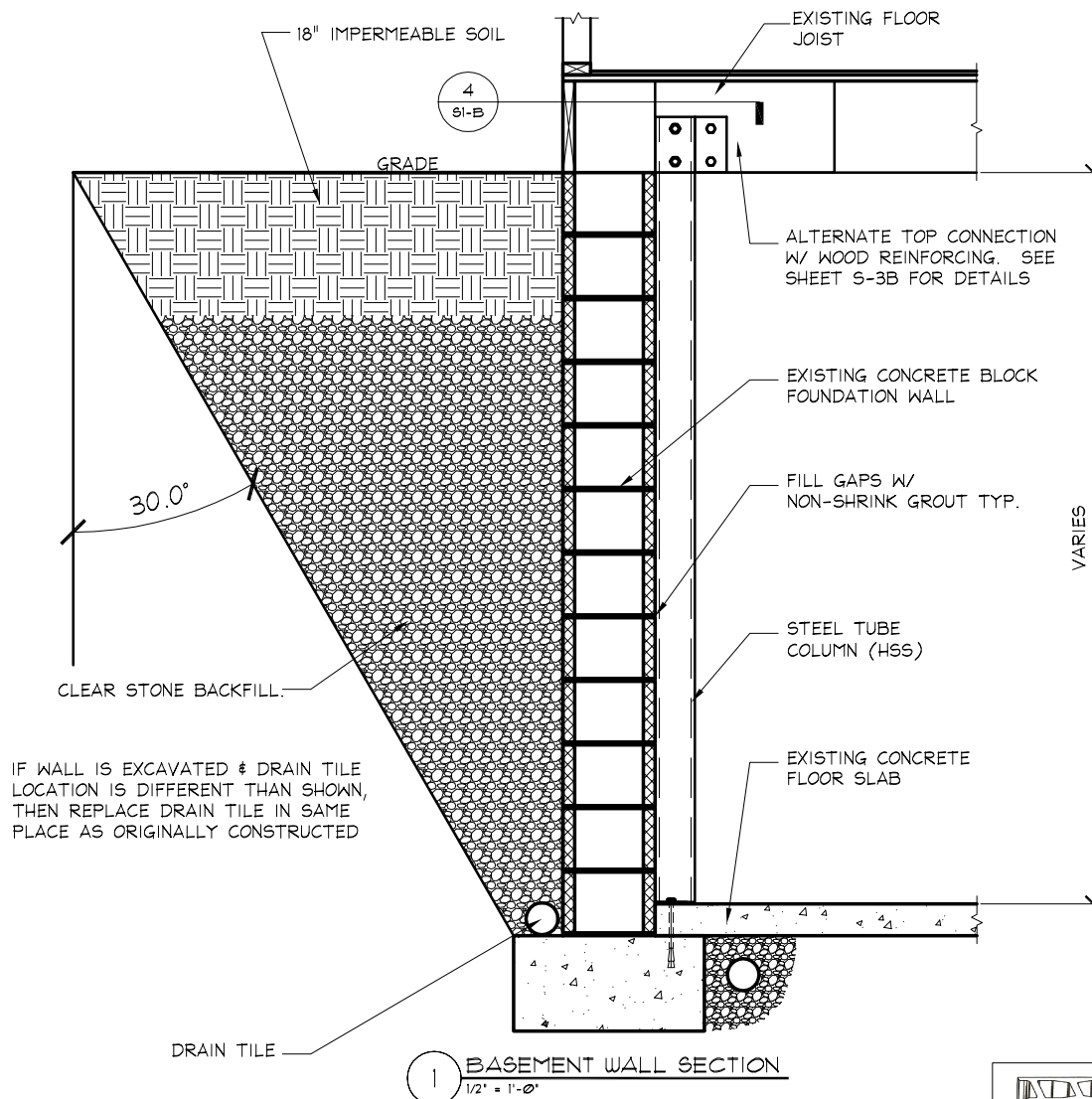
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BOLTS TO BE ZINC PLATED CARBON STEEL OR BETTER.

NEW WOOD BLOCKING TO BE DOUG FIR NO.2 OR BETTER.

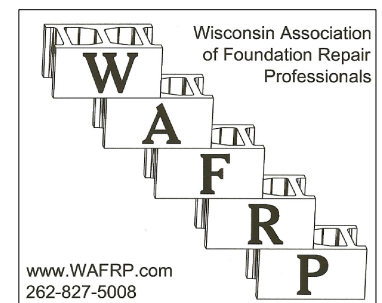
SCREW TYPE ANCHORS CAN BE USED IN LIEU OF EXPANSION BOLTS IN ALL CASES.

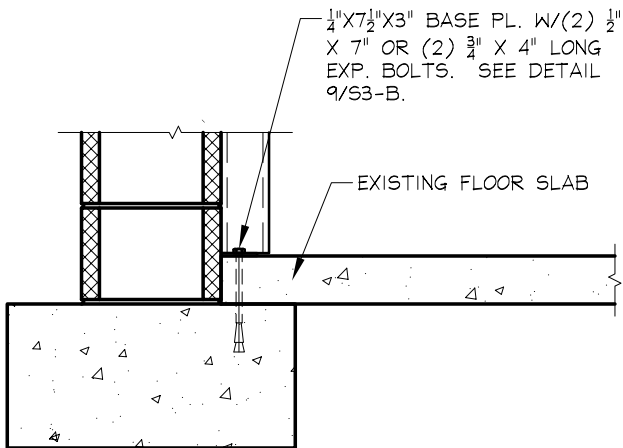
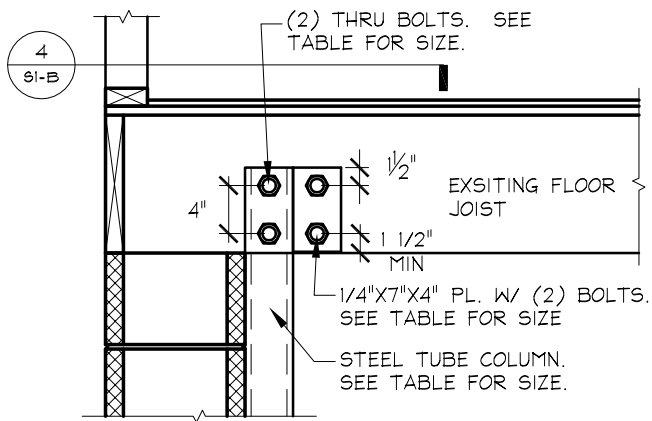
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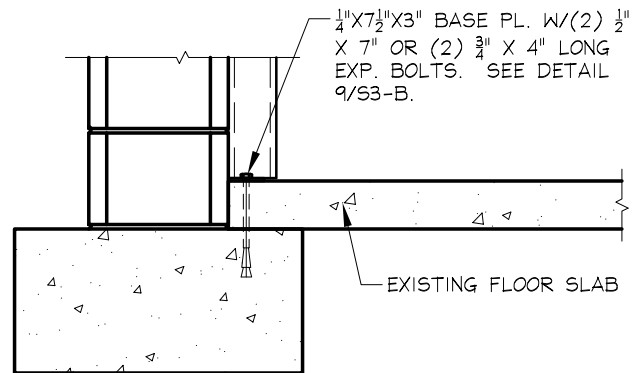
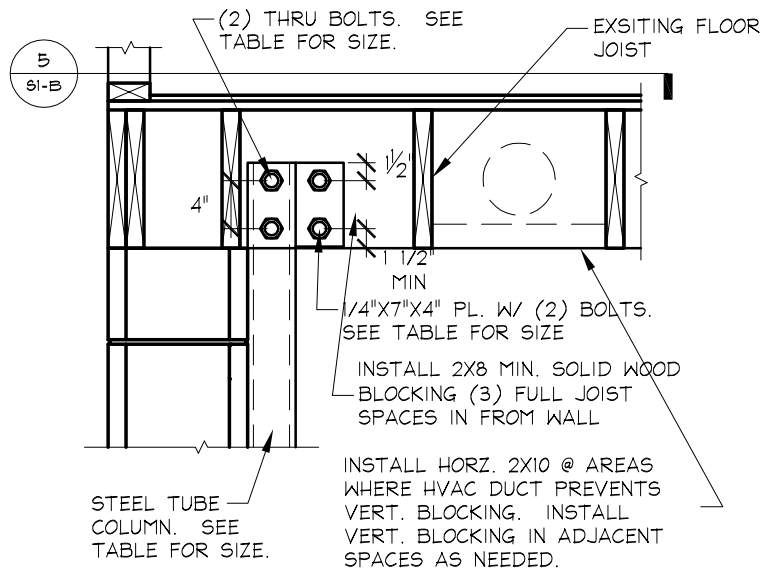
TITLE: 4 Bolt Basement Wall Reinforcing Details	
SHEET: S1-B, Appendix A	DRAWN: Jim Jendusa
DATE: 3/26/03	REVISION: 6/20/07

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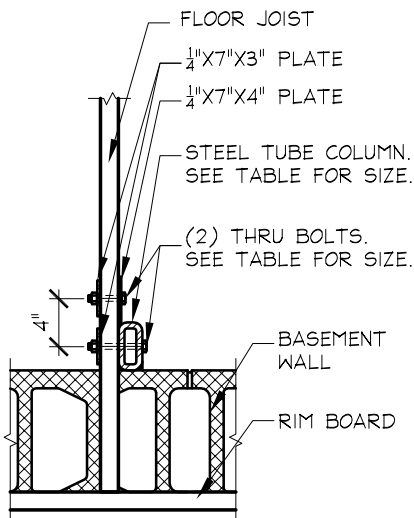




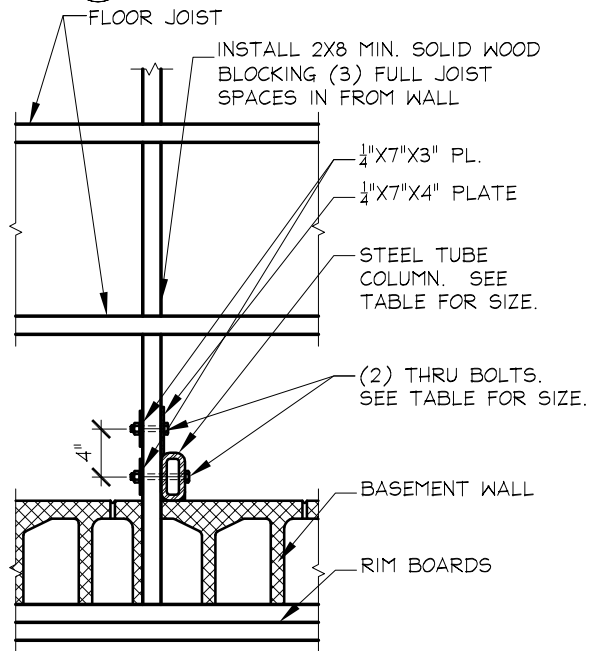
2 CONNECTION DETAIL SIDE VIEW
3/4" = 1'-0"



3 CONNECTION DETAIL SIDE VIEW
3/4" = 1'-0"



4 TOP CONNECTION DETAIL
3/4" = 1'-0"



5 TOP CONNECTION DETAIL
3/4" = 1'-0"

TITLE: 4 Bolt Top & Bottom Connection Details

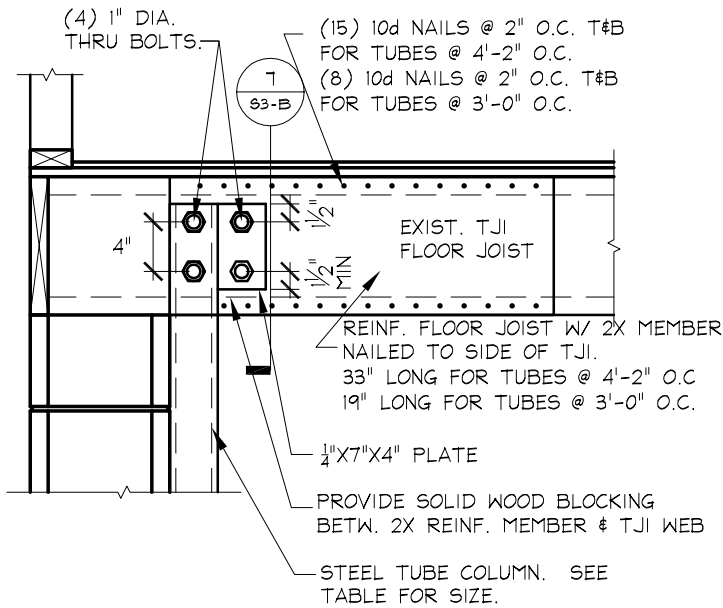
SHEET: S2-B, Appendix A

DRAWN: Jim Jendusa

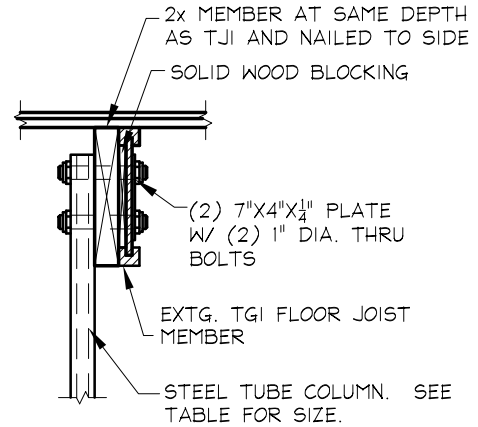
DATE: 3/26/03

REVISION: 6/20/07

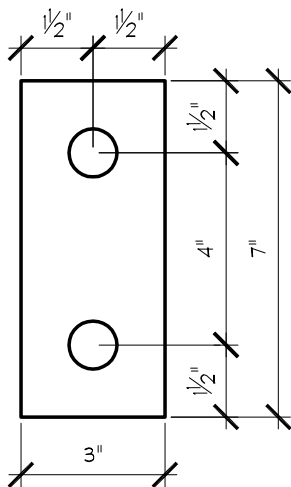
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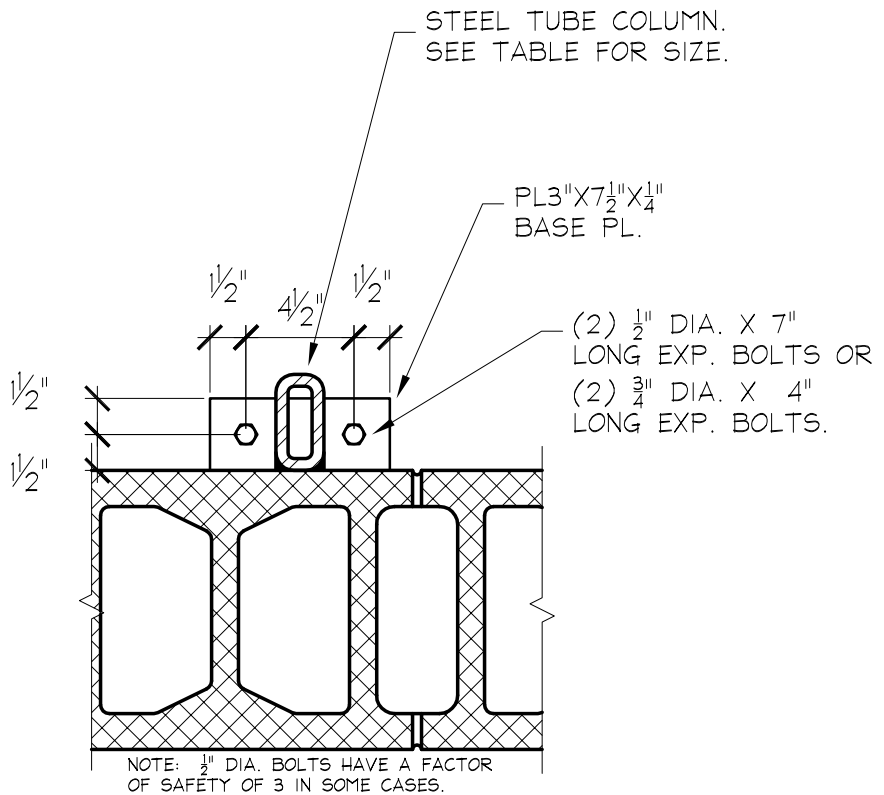
6 TJI CONNECTION DETAIL SIDE VIEW
3/4" = 1'-0"



7 TJI CONNECTION DETAIL SECTION
3/4" = 1'-0"

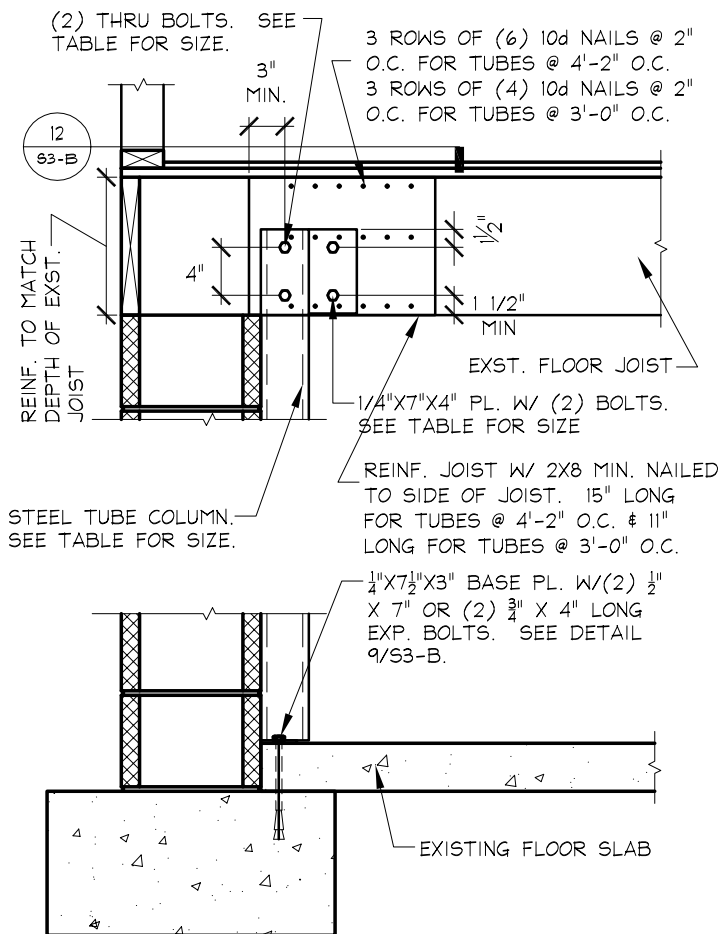


8 TOP PLATE DETAIL
3" = 1'-0"

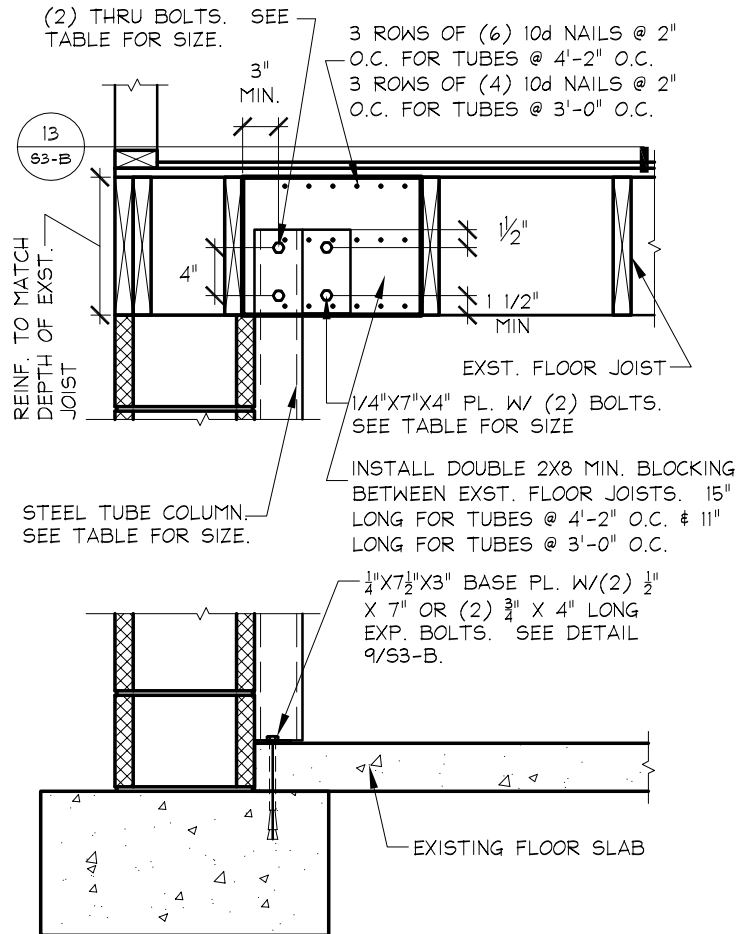


9 BOTTOM CONN. DETAIL
1 1/2" = 1'-0"

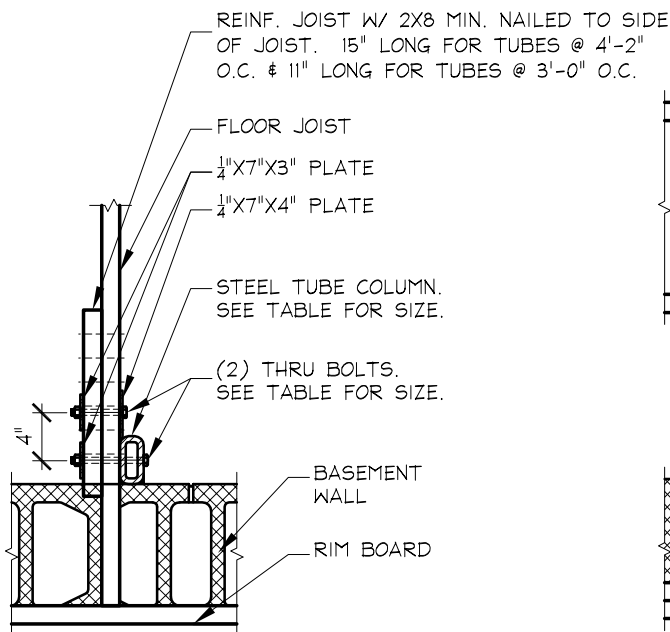
TITLE: 4 Bolt Alt. Top Connection W/ Double Floor Joist	
SHEET: S3-B, Appendix A	DRAWN: Jim Jendusa
DATE: 3/26/03	REVISION: 6/20/07



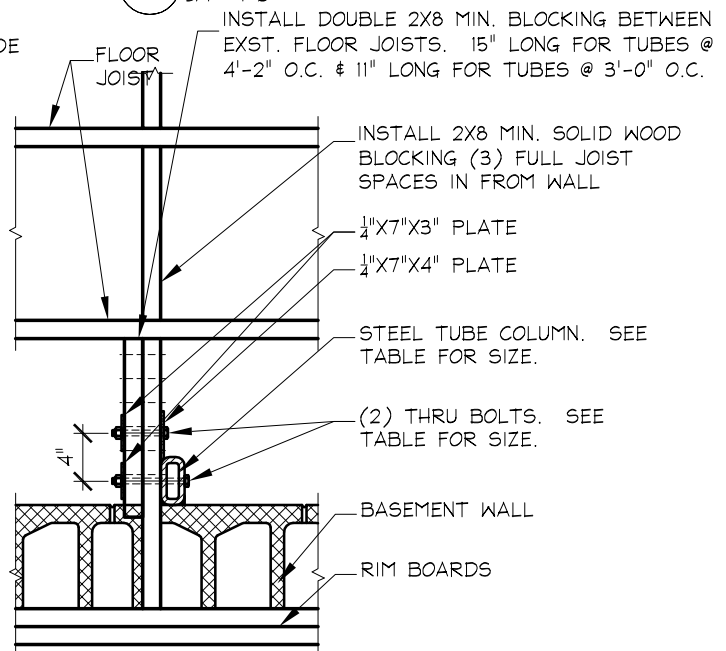
10 CONNECTION DETAIL SIDE VIEW
3/4" = 1'-0"



11 CONNECTION DETAIL SIDE VIEW
3/4" = 1'-0"



12 TOP CONNECTION DETAIL
3/4" = 1'-0"



13 TOP CONNECTION DETAIL
3/4" = 1'-0"

TITLE: 4 Bolt Alt. Top Connection W/ Double Floor Joist

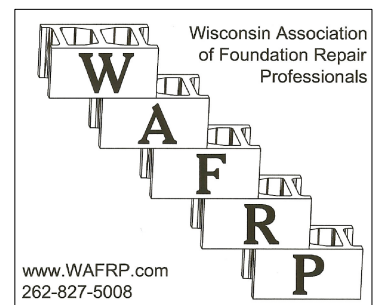
SHEET: S4-B, Appendix A

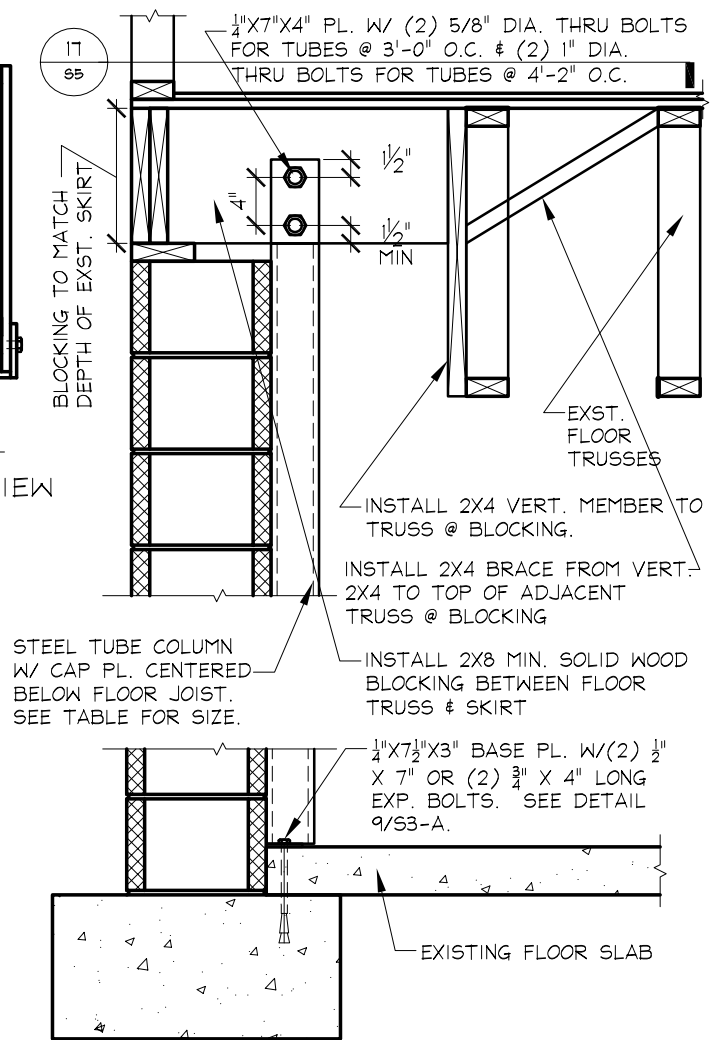
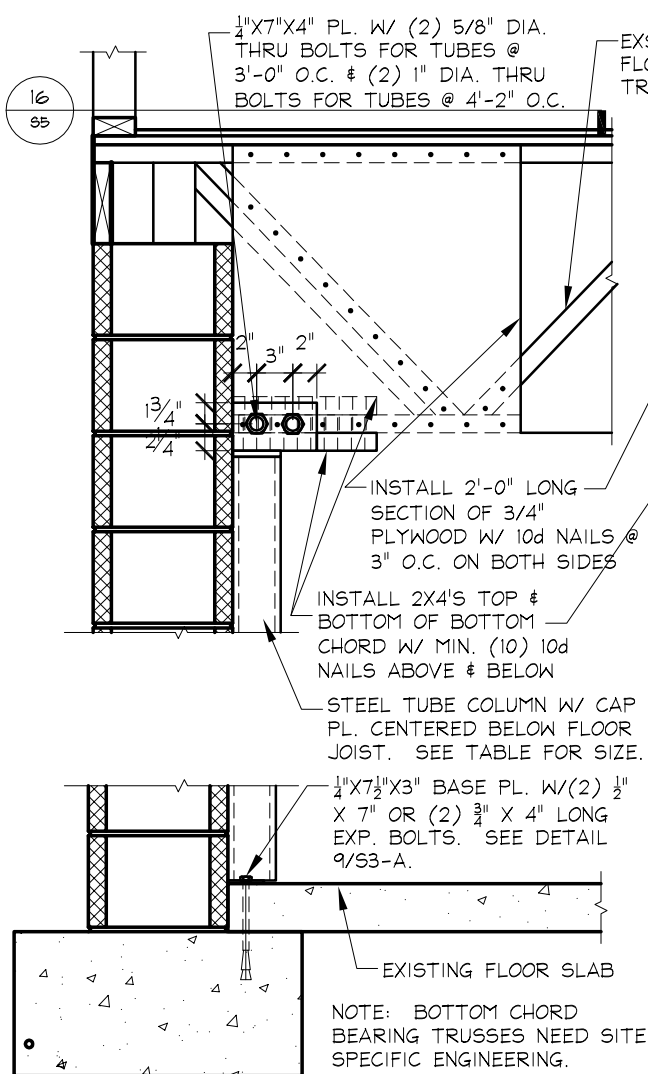
DRAWN: Jim Jendusa

DATE: 3/26/03

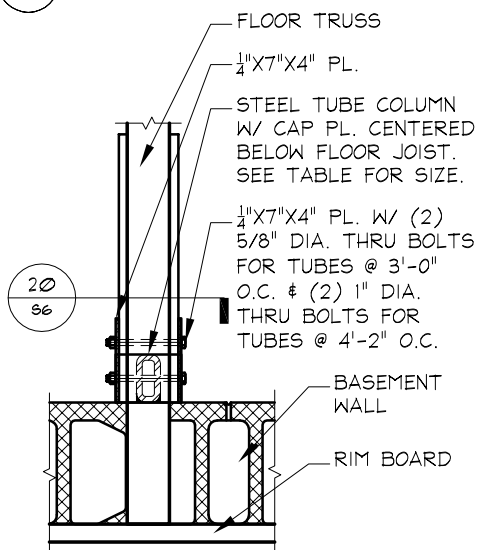
REVISION: 6/20/07

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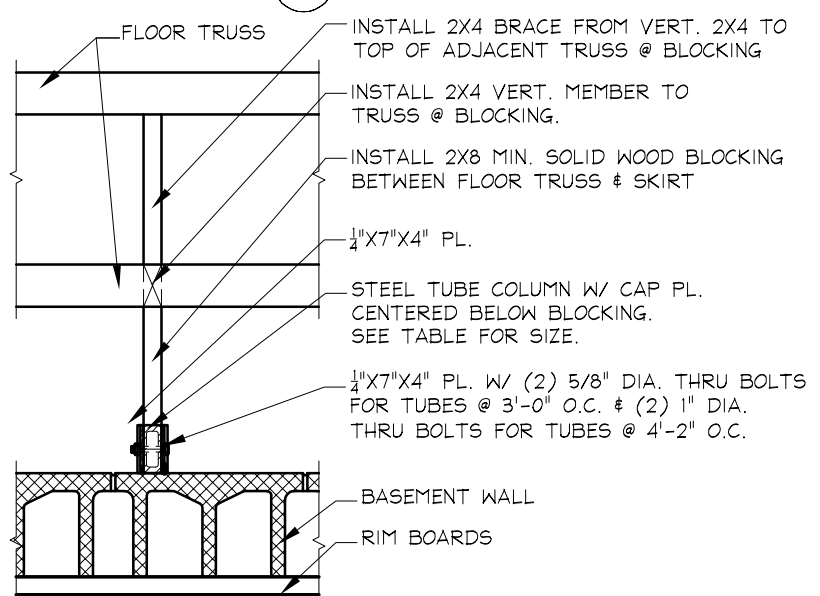




14 CONNECTION DETAIL SIDE VIEW
3/4" = 1'-0"



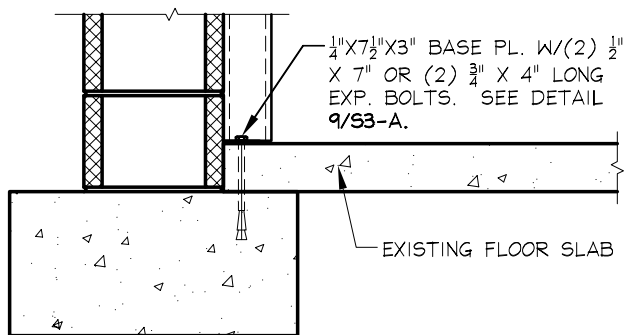
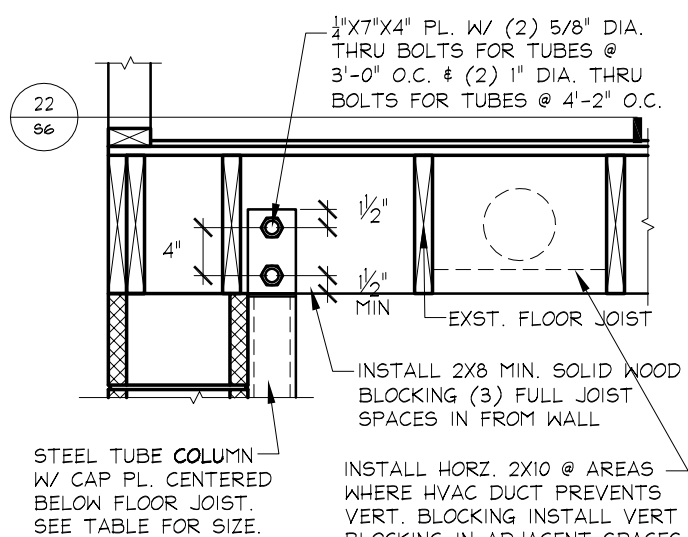
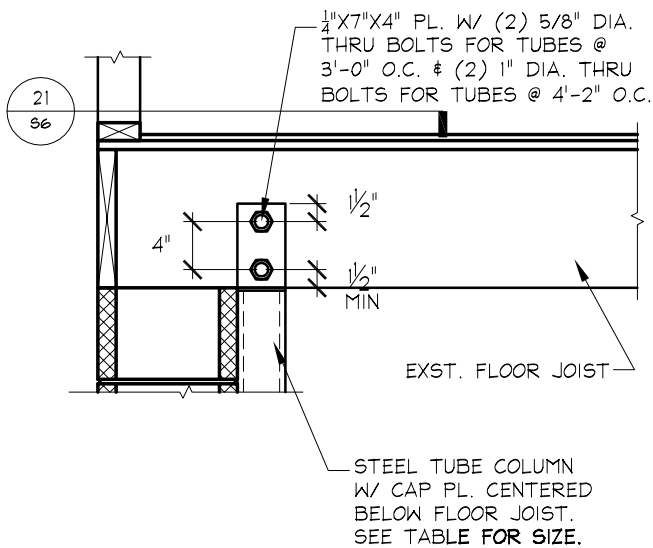
15 CONNECTION DETAIL SIDE VIEW
3/4" = 1'-0"



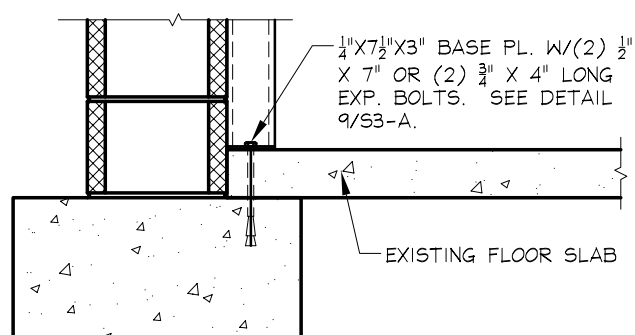
16 TOP CONNECTION DETAIL
3/4" = 1'-0"

17 TOP CONNECTION DETAIL
3/4" = 1'-0"

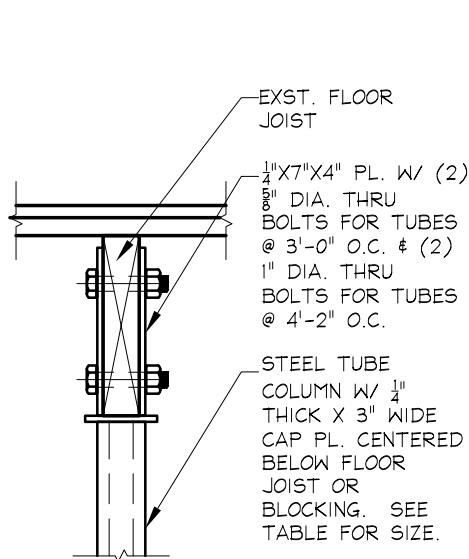
TITLE: Alt. Top Connection W/ Floor Trusses	
SHEET: S5, Appendix A	DRAWN: Jim Jendusa
DATE: 3/26/03	REVISION: 6/20/07



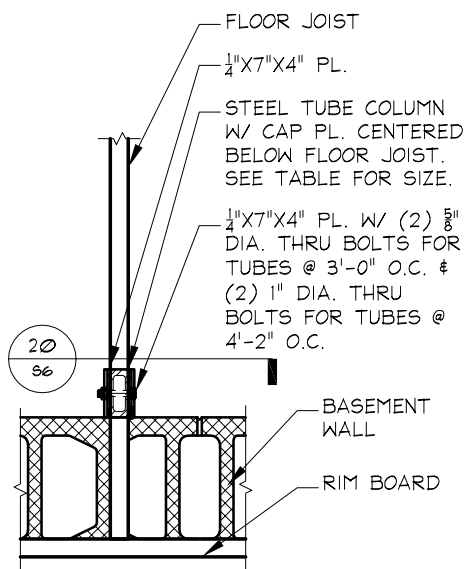
18 CONNECTION DETAIL SIDE VIEW
3/4" = 1'-0"



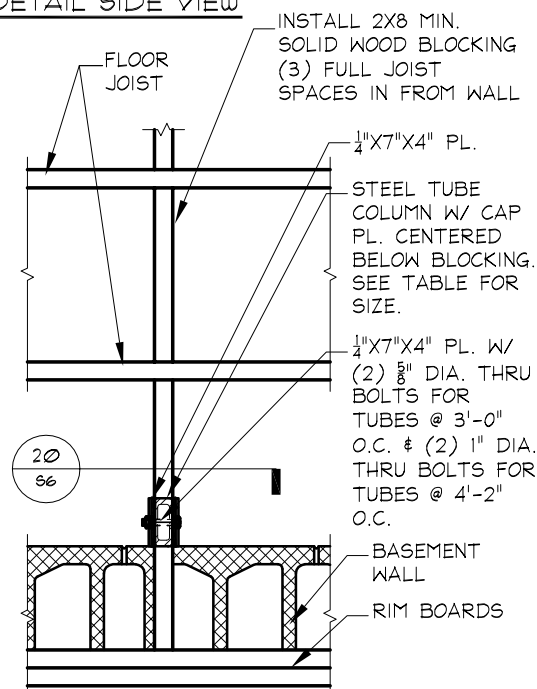
19 CONNECTION DETAIL SIDE VIEW
3/4" = 1'-0"



20 CONNECTION DETAIL SECTION
1 1/2" = 1'-0"

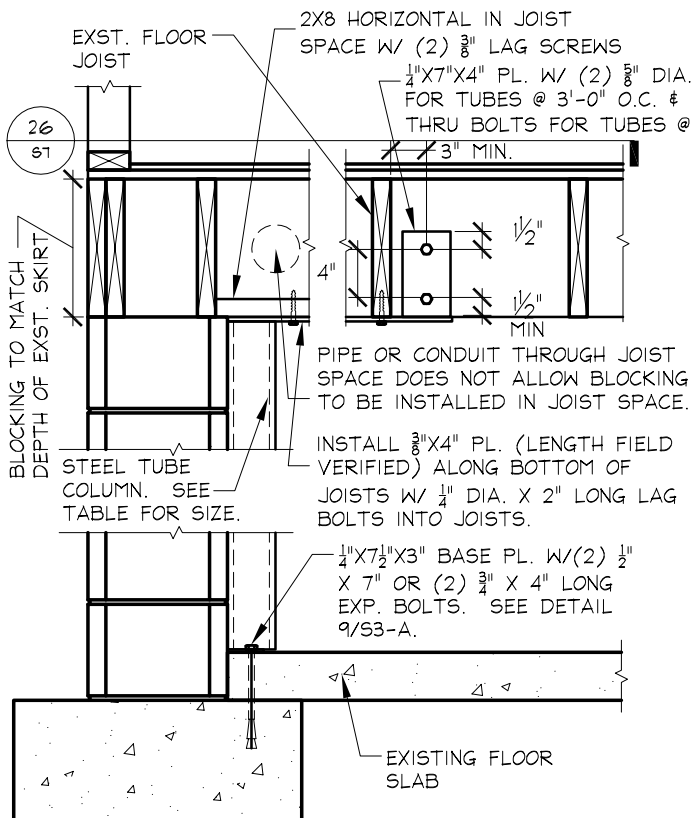


21 TOP CONNECTION DETAIL
3/4" = 1'-0"



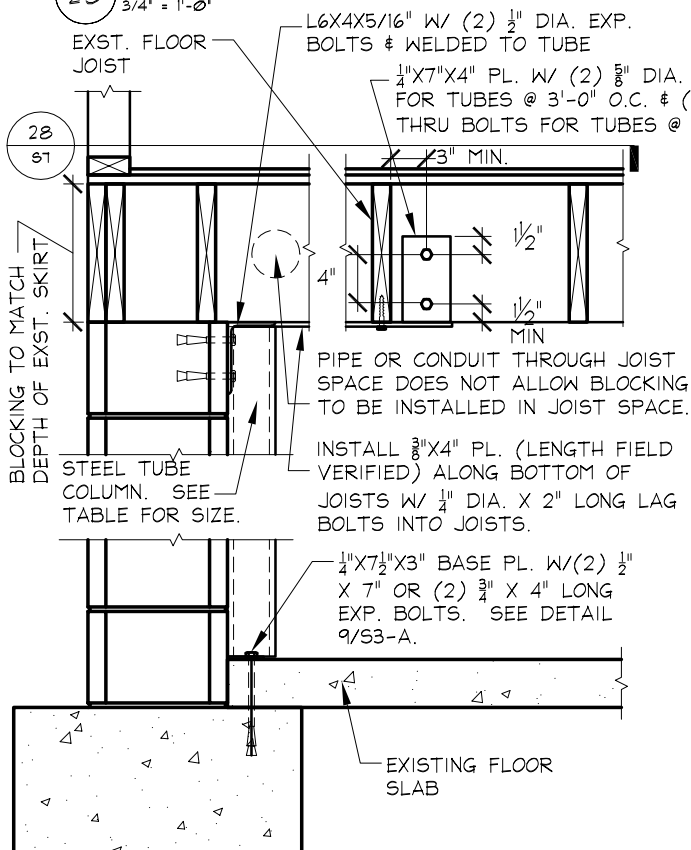
22 TOP CONNECTION DETAIL
3/4" = 1'-0"

TITLE: Alt. Top Connection W/ Top Saddle	
SHEET: S6, Appendix A	DRAWN: Jim Jendusa
DATE: 3/26/03	REVISION: 6/20/07



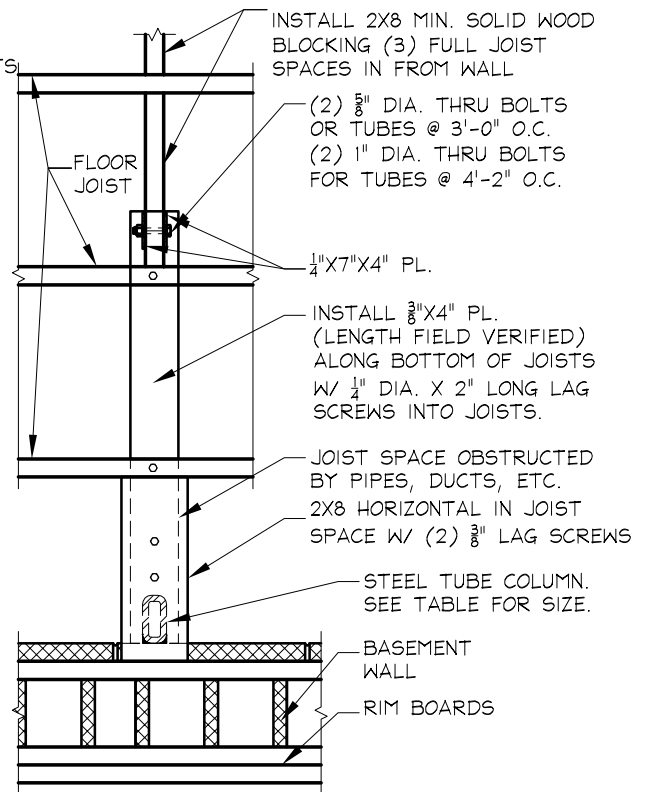
25 OFFSET CONN. DETAIL SIDE VIEW

3/4" = 1'-0"



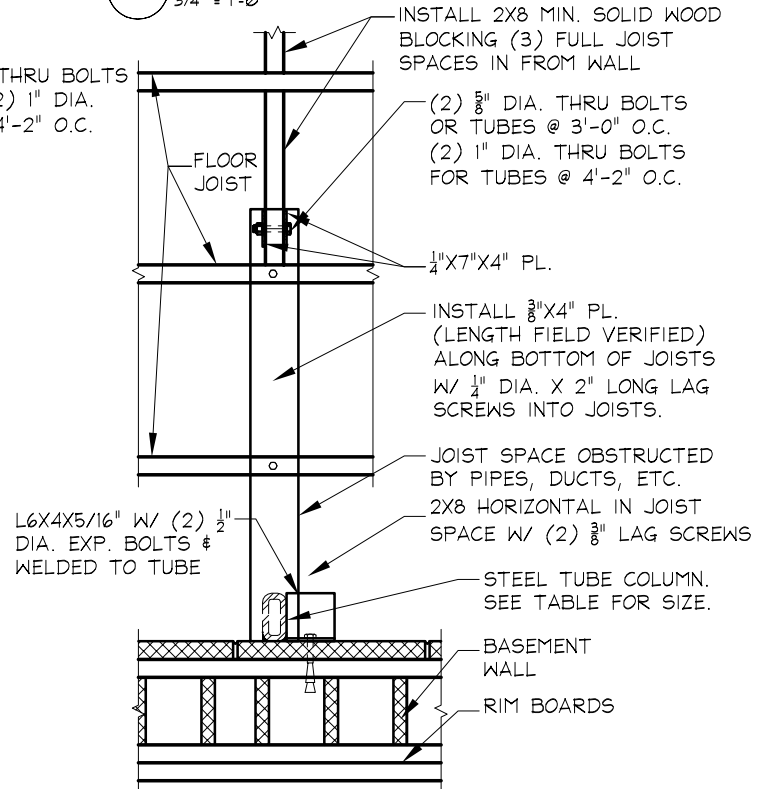
27 ALT. OFFSET CONN. DETAIL SIDE VIEW

3/4" = 1'-0"



26 OFFSET CONN. DETAIL TOP VIEW

3/4" = 1'-0"



28 ALT. OFFSET CONN. DETAIL TOP VIEW

3/4" = 1'-0"

TITLE: Misc. Repair Details

SHEET: S7, Appendix A

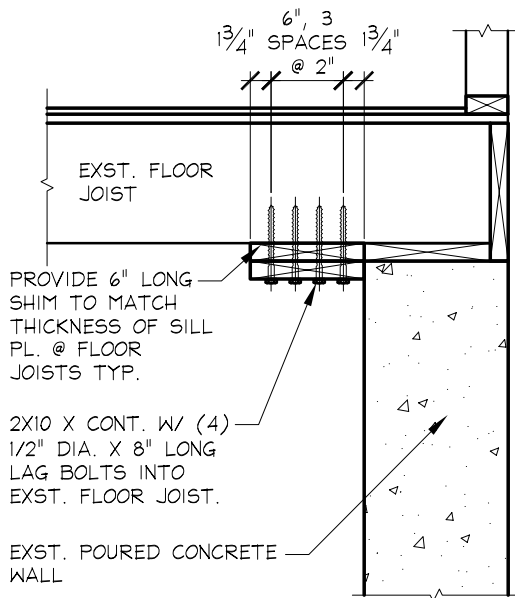
DRAWN: Jim Jendusa

DATE: 3/26/03

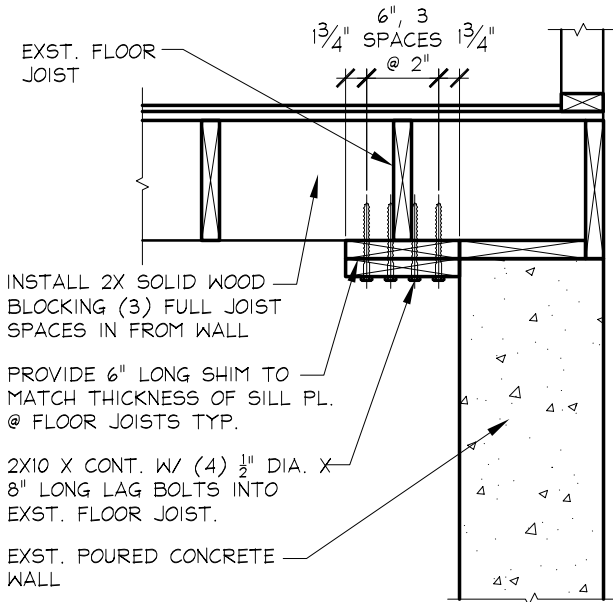
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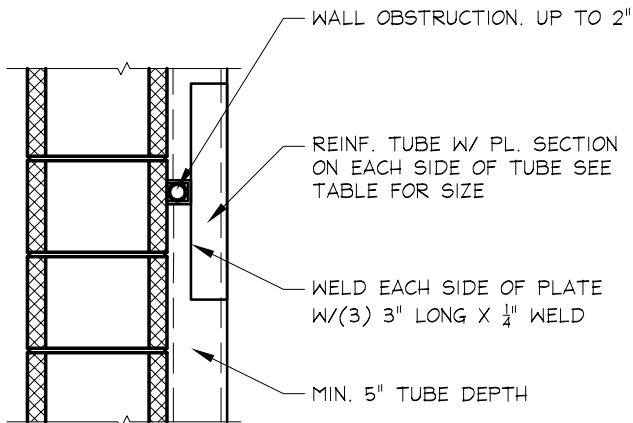




29 FLOOR JOIST CONNECTION DETAIL
3/4" = 1'-0"

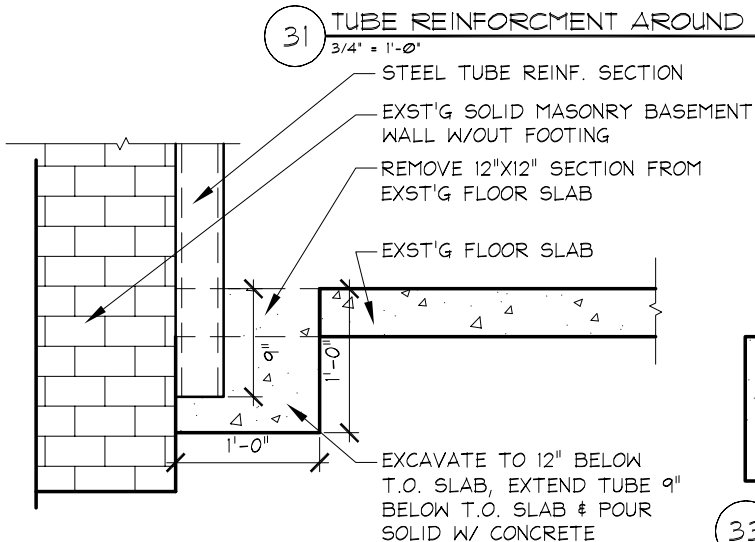


30 FLOOR JOIST CONNECTION DETAIL
3/4" = 1'-0"

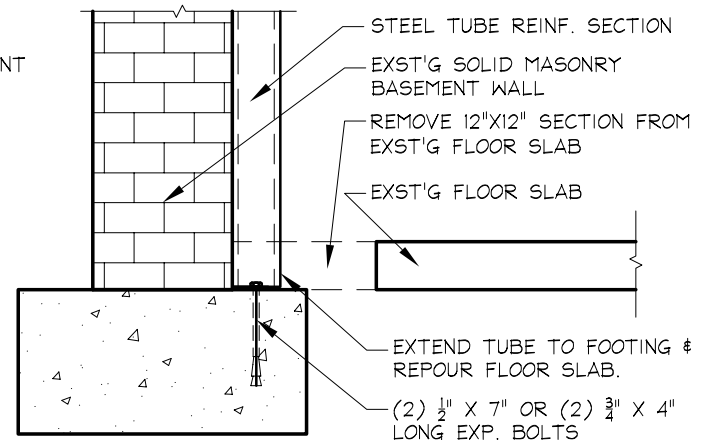


STEEL TUBE REINFORCING AROUND OBSTRUCTIONS			
WALL HT.	WALL REINF. *	SPACING	REINFORCING PLATES
10 COURSES (6'-10")	HSS 5"x2"x3/16"	3'-0"	(2) PL 1/4"x3"x18"
	HSS 5"x2"x3/16"	4'-2"	(2) PL 7/16"x3"x18"
11 COURSES (7'-6")	HSS 5"x2"x3/16"	3'-0"	(2) PL 3/8"x3"x18"
	HSS 6"x2"x3/16"	4'-2"	(2) PL 1/2"x4"x18"
12 COURSES (8'-2")	HSS 5"x3"x1/4"	3'-0"	(2) PL 1/2"x3"x18"
	HSS 6"x3"x1/4"	4'-2"	(2) PL 5/8"x4"x18"

* 2X4 TUBES CAN BE USED IF NOTCH IS LESS THAN OR EQUAL TO 1"



32 WALL REINF. BOTTOM CONNECTION W/O FTG
3/4" = 1'-0"



33 WALL REINF. BOTTOM CONNECTION TO FTG
3/4" = 1'-0"

TITLE: Misc. Repair Details	
SHEET: S8, Appendix A	DRAWN: Jim Jendusa
DATE: 3/26/03	REVISION: 6/20/07



BASEMENT WALL REINFORCEMENT DESIGN TABLES

(Tables based on a 90 PCF soil pressure)

WALL HEIGHT* - 10 COURSES (up to 6'-10")

STEEL SIZE, SPACING and BLOCK SIZE	SINGLE JOIST SIDE MOUNT	DOUBLE JOIST Or 2x8 min. nailed to side of joist.	SINGLE JOIST With SADDLE	TJI JOIST
4" X 2" X 1/4" 36" Max. Spacing 8", 10" or 12"	(2) 1" Dia. Bolts See Details 2-5 on S1-A (4) 1/2" Dia. Bolts See Details 2-5 on S1-B	(2) 5/8" Dia. Bolts See Details 10-14 on S4-A	(2) 1/2" Dia. Bolts See Details 18-22 on S6	(2) 1" Dia. Bolts See Details 6-7 on S3-A
5" X 2" X 3/16" 50" Max. Spacing 10" or 12"	(4) 5/8" Dia. Bolts See Details 2-5 on S1-B	(2) 3/4" Dia. Bolts See Details 10-14 on S4-B (4) 1/2" Dia. Bolts See Details 10-14 on S4-B	(2) 5/8" Dia. Bolts See Details 18-22 on S6	(4) 5/8" Dia. Bolts See Details 6-7 on S3-B

WALL HEIGHT - 11 COURSES (6'-10" to 7'-6")

STEEL SIZE, SPACING and BLOCK SIZE	SINGLE JOIST SIDE MOUNT	DOUBLE JOIST Or 2x8 min. nailed to side of joist.	SINGLE JOIST With SADDLE	TJI JOIST
5" X 2" X 3/16" 36" Max. Spacing 8", 10", or 12"	(2) 1" Dia. Bolts See Details 2-5 on S1-A (4) 1/2" Dia. Bolts See Details 2-5 on S1-B	(2) 5/8" Dia. Bolts See Details 10-14 on S4-A	(2) 5/8" Dia. Bolts See Details 18-22 on S6	(2) 1" Dia. Bolts See Details 6-7 on S3-A
6" X 2" X 3/16" 50" Max. Spacing 10", or 12"	(4) 3/4" Dia. Bolts See Details 2-5 on S1-B	(2) 1" Dia. Bolts See Details 10-14 on S4-A (4) 1/2" Dia. Bolts See Details 10-14 on S4-B	(2) 3/4" Dia. Bolts See Details 18-22 on S6	(4) 3/4" Dia. Bolts See Details 6-7 on S3-B

WALL HEIGHT - 12 COURSES (7'-6" to 8'-2")

STEEL SIZE, SPACING and BLOCK SIZE	SINGLE JOIST SIDE MOUNT	DOUBLE JOIST Or 2x8 min. nailed to side of joist.	SINGLE JOIST With SADDLE	TJI JOIST
5" X 3" X 1/4" 36" Max. Spacing 8", 10", or 12"	(4) 5/8" Dia. Bolts See Details 2-5 on S1-A	(2) 3/4" Dia. Bolts See Details 10-14 on S4-B (4) 1/2" Dia. Bolts See Details 10-14 on S4-B	(2) 5/8" Dia. Bolts See Details 18-22 on S6	(4) 5/8" Dia. Bolts See Details 6-7 on S3-B
6" X 3" X 1/4" 50" Max. Spacing 10", or 12"	(4) 3/4" Dia. Bolts See Details 2-5 on S1-B	(2) 1" Dia. Bolts See Details 10-14 on S4-B (4) 5/8" Dia. Bolts See Details 10-14 on S4-B	(2) 1" Dia. Bolts See Details 18-22 on S6	(4) 3/4" Dia. Bolts See Details 6-7 on S3-B

*Wall Height is top of floor to bottom of joist

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